					DEPARTMEN <sup>-</sup>	TATE OF UTAH TOF NATURAL RES DF OIL, GAS AND M		ES		AMENDE	FOR D REPORT				
			APPLICA <sup>*</sup>	TION FOR	PERMIT TO DRILL						-25D-46				
2. TYPE (	OF WORK	DRILL NEW WE		REENTER P	A WELL CO. DEEDEN	I WELL			3. FIELD OR WILDCA	Γ					
4. TYPE C	)F WELL	DRILL NEW WE				WELL O			5. UNIT or COMMUNI			NT NAM	E		
6. NAME	OF OPERATO	R	Oil Well		ed Methane Well: NO				7. OPERATOR PHONE		0.1.0.1				
8. ADDRE	SS OF OPERA		1000 1011 01	BILL BARR					9. OPERATOR E-MAII	-					
	RAL LEASE NU	IMBER	1099 18th St	reet Ste 23	11. MINERAL OWNERS	400					ettcorp.co	om —			
	L, INDIAN, OR	20G0005500 E OWNER (if box	12 - 'fee'\		FEDERAL INC	DIAN 📵 STATE (	) FE			-	STATE (		E(_)		
		FACE OWNER (If I		.n											
IJ. ADDI	LUGU OF SUKI	ACE OWNER (III	JOX 12 = 166		40 INTEND TO COM	MINOLE PROPULATION	N FROM		ALTAMONT  UNIT OF COMMUNITIZATION AGREEMENT NAME  OPERATOR PHONE 303 312-8134  OPERATOR E-MAIL ttallang@billbarrettcorp.com  STATE FEE  4. SURFACE OWNER PHONE (if box 12 = 'fee')  6. SURFACE OWNER E-MAIL (if box 12 = 'fee')  9. SLANT  VERTICAL DIRECTIONAL HORIZONTAL TOWNSHIP RANGE MERIDIAN  4.0 S 6.0 W U  4.0 S 6.0 W U  4.0 S 6.0 W U  3. NUMBER OF ACRES IN DRILLING UNIT 640  6. PROPOSED DEPTH MD: 7710 TVD: 7595  9. SOURCE OF DRILLING WATER / VATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-180  Cement Sacks Yield Weight No Used 0 0.0 0.0  Light , Type Unknown 240 3.16 11.0  OTHER 590 2.31 11.0  OTHER 760 1.42 13.5						
	2 = 'INDIAN')	OR TRIBE NAME			18. INTEND TO COMM	NS			_						
		Uintah and Ouray				Commingling Applicat		10 📵							
				DOTAGES	QTR-QTR	SI	ECTION				ME				
<u> </u>	ON AT SURFA				SL 1963 FWL	SESW		25							
<u> </u>		oducing Zone			SL 1280 FWL SL 1280 FWL										
At Total Depth         808 FSL 1280 FWL         SWSW         25           21. COUNTY         22. DISTANCE TO NEAREST LEASE LINE (Feet)								25							
		UINTAH			25. DISTANCE TO NEA	808				640					
					(Applied For Drilling						VD: 7595				
27. ELEV	ATION - GRO	7026			28. BOND NUMBER	LPM8874725				OVAL NUM	BER IF AP	PLICABL	.E		
					Hole, Casing	, and Cement Info	ormatio	on							
String	Hole Size	Casing Size	Length	Weigh	t Grade & Thread	Max Mud Wt.			Cement		Sacks	Yield	Weight		
Cond	26	16	0 - 80	65.0		8.8					_				
Surf	12.25	9.625	0 - 180	36.0	J-55 ST&C	8.8									
Prod	8.75	5.5	0 - 771	) 17.0	P-110 LT&C	9.6	Н	lalliburton i	• • • • • • • • • • • • • • • • • • • •	known					
1100	0.73	3.3	0 - 771	17.0	1-110 2100	9.0									
			<u> </u>		A	TTACHMENTS							<u> </u>		
	VE	ERIFY THE FOL	LOWING A	RE ATTA	CHED IN ACCORDAN	NCE WITH THE UTA	AH OIL	. AND GAS	CONSERVATION G	ENERAL	RULES				
<b>✓</b> v	/ELL PLAT OR	MAP PREPARED I	BY LICENSE	D SURVEYO	OR OR ENGINEER	<b>№</b> cow	IPLETE I	DRILLING PL	.AN						
Al	FIDAVIT OF S	TATUS OF SURFA	CE OWNER	AGREEMEI	IT (IF FEE SURFACE)	FOR	M 5. IF O	PERATOR IS	OTHER THAN THE LI	EASE OWN	ER				
DI DI	RECTIONAL S	URVEY PLAN (IF	DIRECTION	ALLY OR H	ORIZONTALLY DRILLED	р) горо	OGRAPH	HICAL MAP							
NAME V	enessa Langm	acher		TIT	<b>LE</b> Senior Permit Analys	t	F	PHONE 303	312-8172						
SIGNAT	JRE			DA	TE 04/11/2014		E	EMAIL vlangı	macher@billbarrettcorp	o.com					
	IBER ASSIGNE 04754402			АР	PROVAL			Ball	Sgill						
								Permit	Manager						

# BILL BARRETT CORPORATION <u>DRILLING PLAN</u>

# LC Tribal 13-25D-46

SESW, 895' FSL and 1963' FWL, Section 25, T4S-R6W, USB&M (surface hole) SWSW, 808' FSL and 1280' FWL, Section 25, T4S-R6W, USB&M (bottom hole) Duchesne County, Utah

# 1 - 2. <u>Estimated Tops of Geological Markers and Formations Expected to Contain Water, Oil and Gas and Other Minerals</u>

<u>Formation</u>	Depth – MD	Depth - TVD
Green River	2,029'	2,011'
Mahogany	2,748'	2,674'
Lower Green River*	3,872'	3,757'
Douglas Creek	4,650'	4,535'
Black Shale	5,391'	5,276'
Castle Peak	5,599'	5,484'
Uteland Butte	5,936'	5,821'
Wasatch*	6,148'	6,033'
TD	7,710'	7,595'

<sup>\*</sup>PROSPECTIVE PAY

To operate most efficiently in this manner.

The Wasatch and the Lower Green River are primary objectives for oil/gas.

## 3. **BOP and Pressure Containment Data**

Depth Intervals	BOP Equipment							
0-1,800	No pressure control required							
1,800' – TD	.800' – TD							
	11" 5000# Annular BOP							
- Drilling spool to a	accommodate choke and kill lines;							
- Ancillary equipme	ent and choke manifold rated at 5,000 psi. All BOP and BOPE tests will be in							
accordance with the	he requirements of onshore Order No. 2;							
- The BLM and the	State of Utah Division of Oil, Gas and Mining will be notified 24 hours in							
advance of all BC	advance of all BOP pressure tests.							
- BOP hand wheels	may be underneath the sub-structure of the rig if the drilling rig used is set up							

## 4. <u>Casing Program</u>

Hole Size	SETTING DEPTH (FROM) (TO)		<u>Casing</u> <u>Size</u>	<u>Casing</u> <u>Weight</u>	Casing Grade	<u>Thread</u>	Condition
26"	Surface	80'	16"	65#			
12 1/4"	Surface	1,800'	9 5/8"	36#	J or K 55	ST&C	New
8 3/4"	Surface	TD	5 ½"	17#	P-110	LT&C	New

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Bill Barrett Corporation Drilling Program LC Tribal 13-25D-46 Duchesne County, Utah

## 5. <u>Cementing Program</u>

16" Conductor Casing	Grout
9 5/8" Surface Casing	Lead: 240 sx Halliburton Light Premium with additives
	mixed at 11.0 ppg (yield = $3.16 \text{ ft}^3/\text{sx}$ ) circulated to surface
	with 75% excess. TOC @ Surface
	Tail: 210 sx Halliburton Premium Plus cement with
	additives mixed at 14.8 ppg (yield = $1.36 \text{ ft}^3/\text{sx}$ ), calculated
	hole volume with 75% excess. TOC @ 1,300'
5 ½" Production Casing	Lead: 590 sx Tuned Light cement with additives mixed at
	11.0 ppg (yield = $2.31 \text{ ft}^3/\text{sx}$ ). TOC @ 1,300'
	Tail: 760 sx Halliburton Econocem cement with additives
	mixed at 13.5 ppg (yield = $1.42 \text{ ft}^3/\text{sx}$ ). Top of cement to
	be determined by log and sample evaluation; estimated TOC
	@ 4,891'

# 6. <u>Mud Program</u>

<u>Interval</u>	Weight	Viscosity	Fluid Loss (API filtrate)	<u>Remarks</u>
0'-80'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid
				System
80' - 1,800'	8.3 - 8.8	26 - 36	NC	Freshwater Spud Mud Fluid
				System
1,800' – TD	8.6 - 9.6	42-52	20 cc or less	DAP Polymer Fluid System

Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kicks" will be available at wellsite. BBC may require minor amounts of diesel to be added to its fluid system in order to reduce torque and drag.

# 7. Testing, Logging and Core Programs

Cores	None anticipated;
Testing	None anticipated; drill stem tests may be run on shows of interest;
Sampling	30' to 50' samples; surface casing to TD. Preserve samples all show intervals;
Surveys	MWD as needed to land wellbore;
Logging	DIL-GR-SP, FDC-CNL-GR-CALIPER-Pe-Microlog, Sonic-GR (all TD to surface).
	FMI & Sonic Scanner to be run at geologist's discretion.

# 8. <u>Anticipated Abnormal Pressures or Temperatures</u>

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 3791 psi\* and maximum anticipated surface pressure equals approximately 2120 psi\*\* (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

<sup>\*</sup>Max Mud Wt x 0.052 x TD = A (bottom hole pressure)

<sup>\*\*</sup>Maximum surface pressure = A - (0.22 x TD)

Bill Barrett Corporation Drilling Program LC Tribal 13-25D-46 Duchesne County, Utah

# 9. Auxiliary Equipment

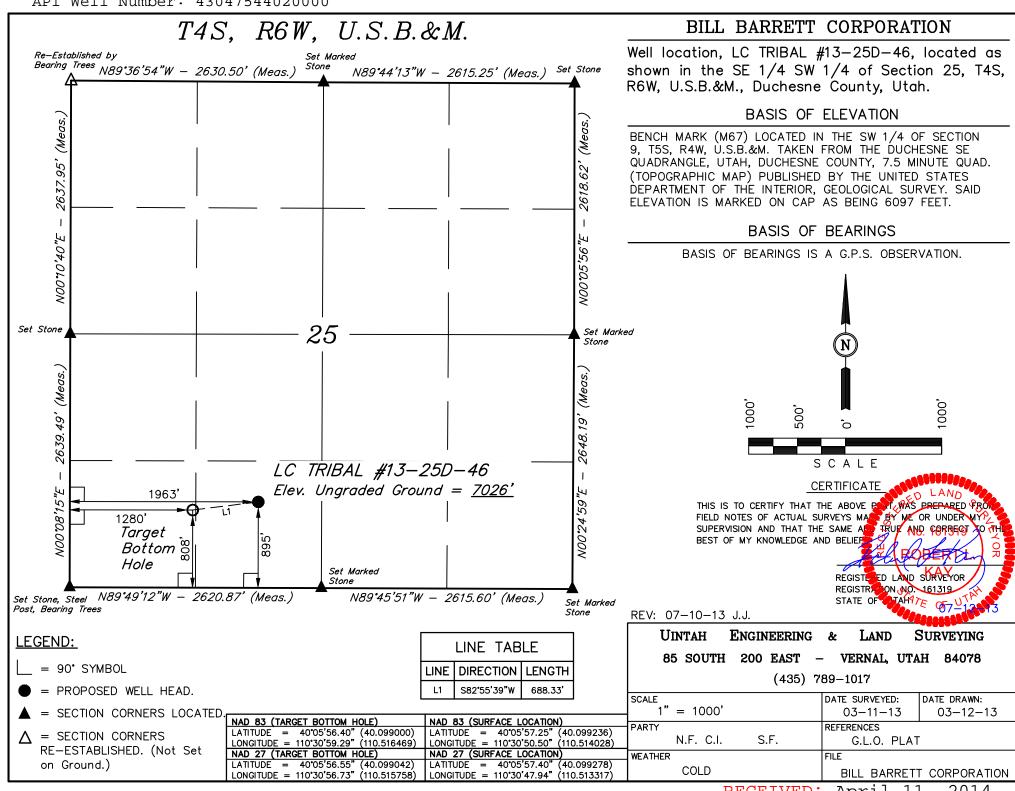
- a) Upper kelly cock; lower Kelly cock will be installed while drilling
- b) Inside BOP or stab-in valve (available on rig floor)
- c) Safety valve(s) and subs to fit all string connections in use Mud monitoring will be visually observed

# 10. Location and Type of Water Supply

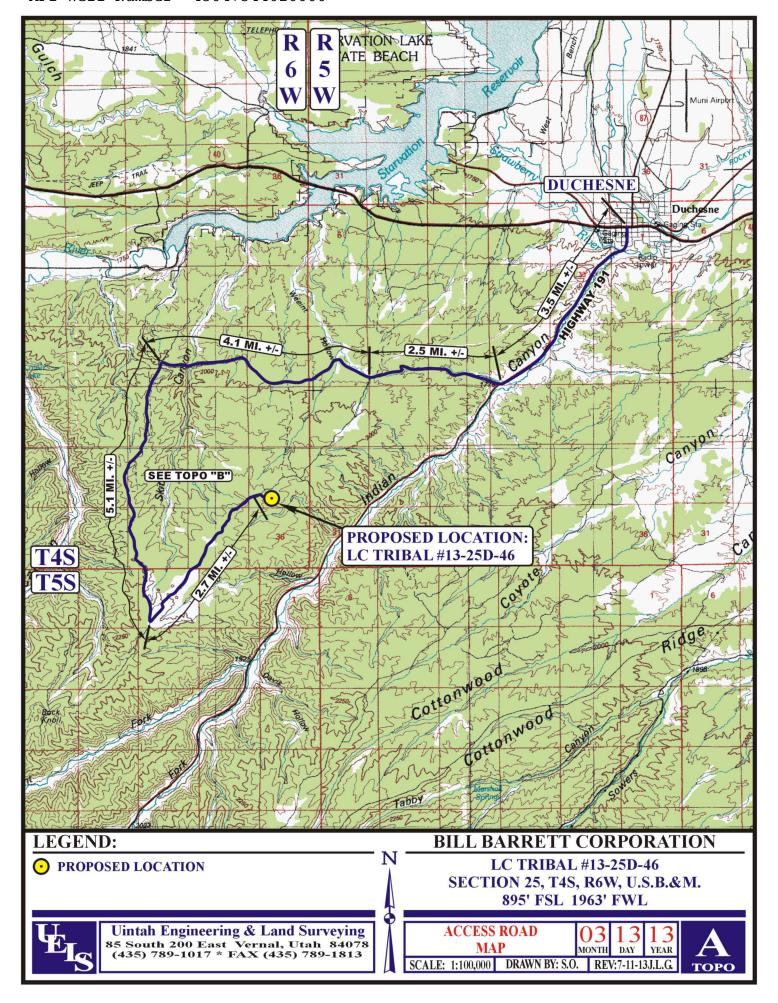
Water for the drilling and completion will be trucked from the Duchesne City Culinary Water Dock located in Sec. 1, T4S, R5W water right number 43-180.

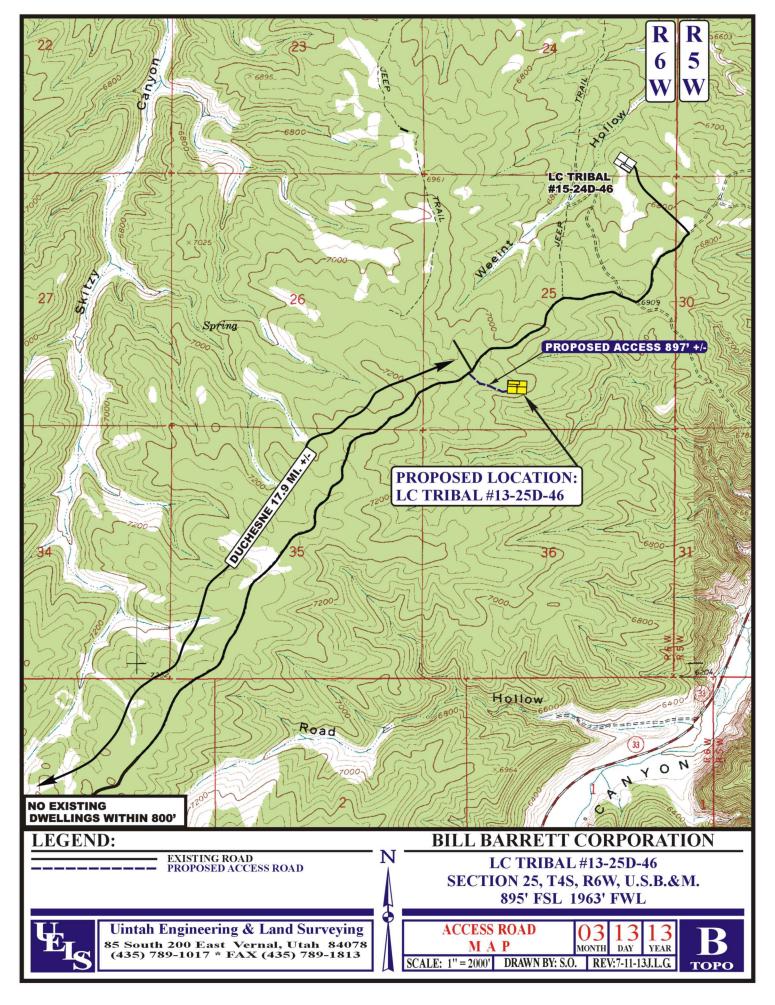
# 11. <u>Drilling Schedule</u>

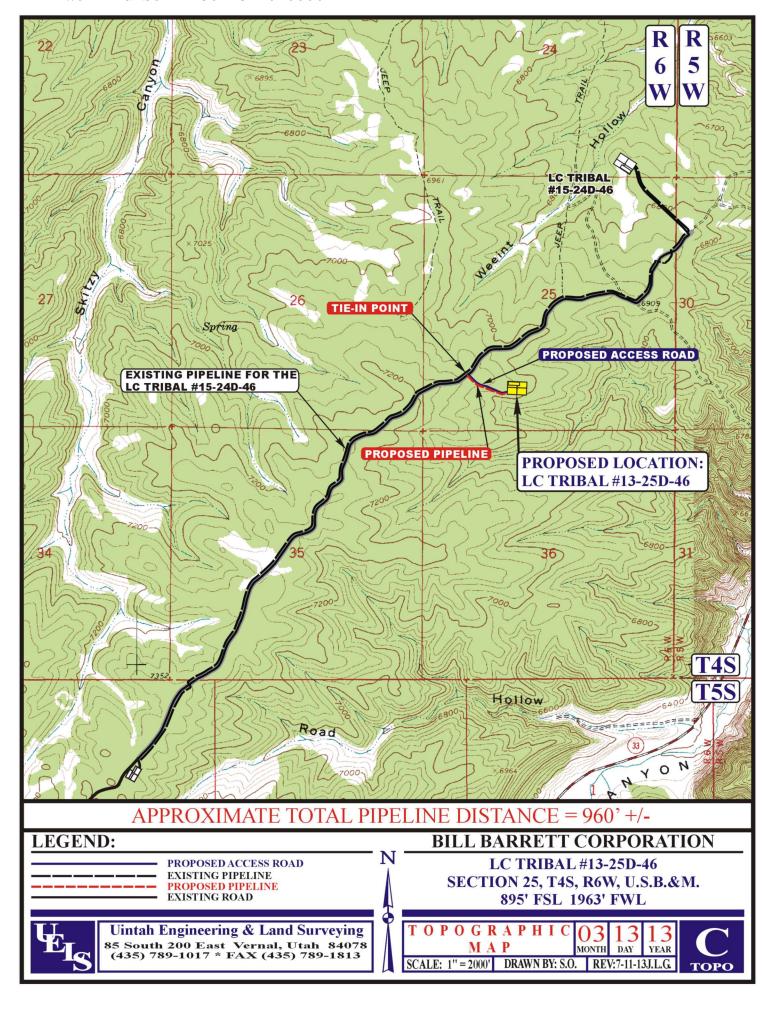
Location Construction: To be determined
Spud: To be determined
Duration: 15 days drilling time
6 days completion time

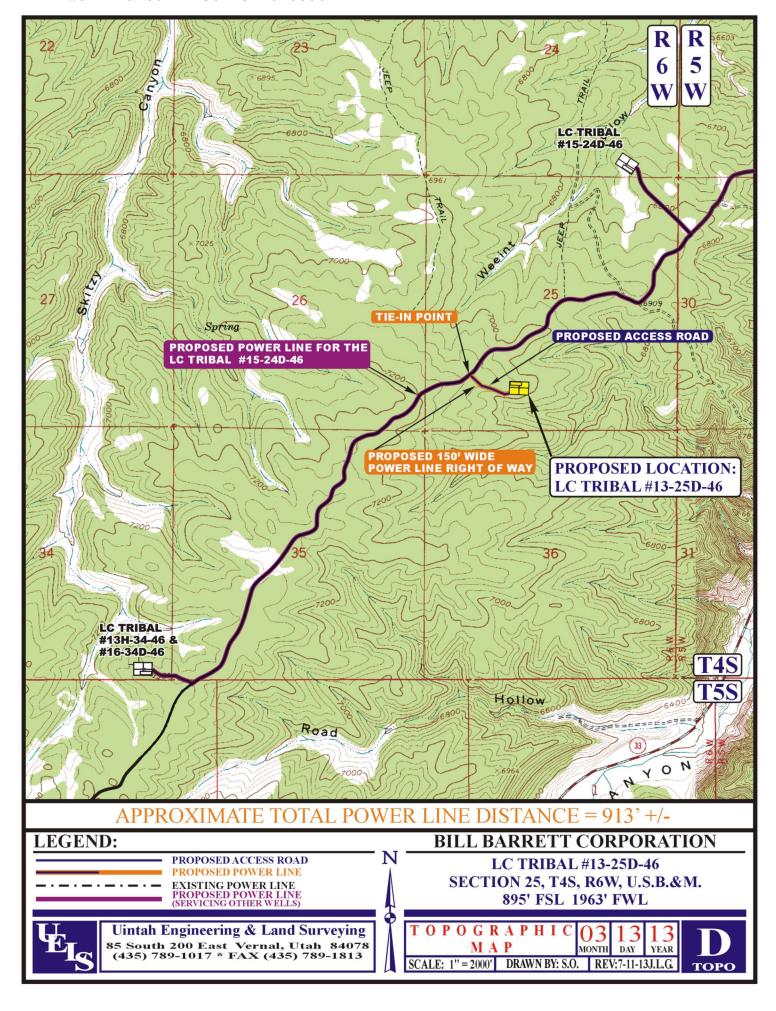


RECEIVED: April 11, 2014











# **Payzone Directional**

Planning Report

TVD Reference:

MD Reference:

North Reference:



Database: Company: MasterDB

**Bill Barrett Corporation** 

Local Co-ordinate Reference:

Well LC Tribal 13-25D-46

LC Tribal 13-25D-46 @ 7039.0usft (Original

Well Elev)

LC Tribal 13-25D-46 @ 7039.0usft (Original

Well Elev)

Project: Site:

Fort Duchesne

SECTION 25 T4S, R6W

Well:

LC Tribal 13-25D-46

Wellbore: Wellbore #1 Design: Design #1

**Survey Calculation Method:** 

Minimum Curvature

Project

Fort Duchesne

Map System: Geo Datum:

US State Plane 1983 North American Datum 1983 System Datum:

Mean Sea Level

Map Zone:

Well

Utah Southern Zone

SECTION 25 T4S, R6W Site

Site Position: From: Lat/Long Northing: Easting:

11,096,736.45 usft 1,917,918.98 usft 13-3/16 " Latitude: Longitude: **Grid Convergence:** 

40° 6' 21.740 N 110° 30' 31.370 W

0.61°

**Position Uncertainty:** 

0.0 usft Slot Radius:

LC Tribal 13-25D-46, SHL LAT: 40 05 57.25 LONG: -110 30 50.50 11,094,240.73 usft

Latitude:

40° 5' 57.250 N 110° 30' 50.500 W

**Position Uncertainty** 

**Well Position** 

-2.480.1 usft -1,487.7 usft 0.0 usft

Easting: Wellhead Elevation:

Northing:

1,916,457.60 usft 7.039.0 usft Longitude: **Ground Level:** 

7.026.0 usft

Wellbore

Wellbore #1

+N/-S

+E/-W

Magnetics **Model Name** Declination Dip Angle Field Strength Sample Date (°) (°) (nT) IGRF2010 4/8/2014 11.14 65.68 51,947

Design #1 Design Audit Notes: **PROTOTYPE** 0.0 Version: Phase: Tie On Depth: Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 262.82 0.0 0.0 0.0

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,118.6	22.97	262.82	2,094.2	-22.7	-180.2	2.50	2.50	0.00	262.82	
2,953.3	22.97	262.82	2,862.8	-63.4	-503.4	0.00	0.00	0.00	0.00	
3,872.0	0.00	0.00	3,757.0	-86.1	-683.6	2.50	-2.50	0.00	180.00	LC Tribal 13-25D-46
7,710.0	0.00	0.00	7,595.0	-86.1	-683.6	0.00	0.00	0.00	0.00	



Project:

# **Payzone Directional**

Planning Report

MD Reference:



Database: Company: MasterDB

Fort Duchesne

Bill Barrett Corporation

tion TVD Reference:

Well LC Tribal 13-25D-46

LC Tribal 13-25D-46 @ 7039.0usft (Original

Well Elev)

LC Tribal 13-25D-46 @ 7039.0usft (Original

Well Elev)

True

 Site:
 SECTION 25 T4S, R6W

 Well:
 LC Tribal 13-25D-46

Wellbore: Wellbore #1
Design: Design #1

North Reference: Survey Calculation Method:

Local Co-ordinate Reference:

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
0.008	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1 000 0	0.00	0.00	1 000 0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0 1,100.0	0.0		0.0	0.00	0.00	0.00
1,100.0					0.0	0.0			
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 2.									
1,300.0	2.50	262.82	1,300.0	-0.3	-2.2	2.2	2.50	2.50	0.00
1,400.0	5.00	262.82	1,399.7	-1.1	-8.7	8.7	2.50	2.50	0.00
1,500.0	7.50	262.82	1,499.1	-2.4	-19.5	19.6	2.50	2.50	0.00
1,600.0	10.00	262.82	1,598.0	-4.3	-34.5	34.8	2.50	2.50	0.00
1,700.0	12.50	262.82	1,696.0	-6.8	-53.9	54.3	2.50	2.50	0.00
1,753.4	13.83	262.82	1,748.0	-8.3	-66.0	66.5	2.50	2.50	0.00
Water									
1,800.0	15.00	262.82	1,793.2	-9.8	-77.5	78.1	2.50	2.50	0.00
1,900.0	17.50	262.82	1,889.2	-13.3	-105.2	106.1	2.50	2.50	0.00
2,000.0		262.82	,						
	20.00		1,983.9	-17.3	-137.1	138.2	2.50	2.50	0.00
2,029.0	20.72	262.82	2,011.0	-18.5	-147.1	148.3	2.50	2.50	0.00
Green River									
2,100.0	22.50	262.82	2,077.0	-21.8	-173.1	174.5	2.50	2.50	0.00
2,118.6	22.97	262.82	2,094.2	-22.7	-180.2	181.7	2.50	2.50	0.00
Start 834.7 ho	ld at 2118.6 ME	)							
2,200.0	22.07	262.02	2 160 1	26.7	211.7	242.4	0.00	0.00	0.00
	22.97	262.82	2,169.1	-26.7	-211.7	213.4	0.00		
2,300.0	22.97	262.82	2,261.2	-31.5	-250.4	252.4	0.00	0.00	0.00
2,400.0	22.97	262.82	2,353.3	-36.4	-289.2	291.4	0.00	0.00	0.00
2,500.0	22.97	262.82	2,445.4	-41.3	-327.9	330.5	0.00	0.00	0.00
2,600.0	22.97	262.82	2,537.4	-46.2	-366.6	369.5	0.00	0.00	0.00
2,700.0	22.97	262.82	2,629.5	-51.0	-405.3	408.5	0.00	0.00	0.00
2,748.3	22.97	262.82	2,674.0	-53.4	-424.0	427.3	0.00	0.00	0.00
	22.31	202.02	2,017.0	·00. <del>-</del>	727.0	721.3	0.00	0.00	0.00
Mahogany	00.07	000.00	0.704.0	55.0	444.0	447.5	0.00	0.00	0.00
2,800.0	22.97	262.82	2,721.6	-55.9	-444.0	447.5	0.00	0.00	0.00
2,900.0	22.97	262.82	2,813.7	-60.8	-482.7	486.5	0.00	0.00	0.00
2,953.3	22.97	262.82	2,862.8	-63.4	-503.4	507.3	0.00	0.00	0.00
Start Drop -2.	50								
3.000.0	21.80	262.82	2,905.9	-65.6	-521.0	525.1	2.50	-2.50	0.00
-,									
3,100.0	19.30	262.82	2,999.5	-70.0	-555.8	560.2	2.50	-2.50	0.00
3,200.0	16.80	262.82	3,094.6	-73.8	-586.6	591.2	2.50	-2.50	0.00
3,300.0	14.30	262.82	3,191.0	-77.2	-613.2	618.0	2.50	-2.50	0.00
3,400.0	11.80	262.82	3,288.4	-80.0	-635.6	640.6	2.50	-2.50	0.00
3,500.0	9.30	262.82	3,386.7	-82.3	-653.7	658.9	2.50	-2.50	0.00
		262.82							
3,600.0	6.80		3,485.7	-84.1	-667.6	672.9	2.50	-2.50	0.00
3,700.0	4.30	262.82	3,585.2	-85.3	-677.2	682.6	2.50	-2.50	0.00
3,800.0	1.80	262.82	3,685.0	-85.9	-682.5	687.9	2.50	-2.50	0.00
3,872.0	0.00	0.00	3,757.0	-86.1	-683.6	689.0	2.50	-2.50	0.00
C4+ 2020 0 h	old at 3972 0 M	D - TGP3 - LC	Tribal 13-25D-46	TCT					



# **Payzone Directional**

Planning Report



Database: Company:

Project:

MasterDB

**Bill Barrett Corporation** 

SECTION 25 T4S, R6W

Fort Duchesne

Site: Well:

LC Tribal 13-25D-46

Wellbore: Wellbore #1 Design: Design #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

**Survey Calculation Method:** 

Well LC Tribal 13-25D-46

LC Tribal 13-25D-46 @ 7039.0usft (Original

LC Tribal 13-25D-46 @ 7039.0usft (Original

Well Elev) True

nned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,900.0 4,000.0 4,100.0 4,200.0 4,300.0	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	3,785.0 3,885.0 3,985.0 4,085.0 4,185.0	-86.1 -86.1 -86.1 -86.1	-683.6 -683.6 -683.6 -683.6 -683.6	689.0 689.0 689.0 689.0 689.0	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
4,400.0 4,500.0 4,600.0 4,650.0	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	4,285.0 4,385.0 4,485.0 4,535.0	-86.1 -86.1 -86.1 -86.1	-683.6 -683.6 -683.6 -683.6	689.0 689.0 689.0	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
Douglas Cree 4,700.0	k 0.00	0.00	4,585.0	-86.1	-683.6	689.0	0.00	0.00	0.00
4,800.0 4,900.0 4,999.0	0.00 0.00 0.00	0.00 0.00 0.00	4,685.0 4,785.0 4,884.0	-86.1 -86.1 -86.1	-683.6 -683.6 -683.6	689.0 689.0 689.0	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
<b>3PT MKR</b> 5,000.0 5,100.0	0.00 0.00	0.00 0.00	4,885.0 4,985.0	-86.1 -86.1	-683.6 -683.6	689.0 689.0	0.00 0.00	0.00 0.00	0.00 0.00
5,200.0 5,300.0 5,391.0	0.00 0.00 0.00	0.00 0.00 0.00	5,085.0 5,185.0 5,276.0	-86.1 -86.1 -86.1	-683.6 -683.6 -683.6	689.0 689.0 689.0	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
BI Shale Faci		0.00		00.4	000.0	000.0	0.00	0.00	0.00
5,400.0 5,500.0	0.00 0.00	0.00 0.00	5,285.0 5,385.0	-86.1 -86.1	-683.6 -683.6	689.0 689.0	0.00 0.00	0.00 0.00	0.00 0.00
5,599.0	0.00	0.00	5,484.0	-86.1	-683.6	689.0	0.00	0.00	0.00
5,600.0 5,700.0 5,800.0 5,900.0	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	5,485.0 5,585.0 5,685.0 5,785.0	-86.1 -86.1 -86.1 -86.1	-683.6 -683.6 -683.6 -683.6	689.0 689.0 689.0 689.0	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
5,936.0	0.00	0.00	5,821.0	-86.1	-683.6	689.0	0.00	0.00	0.00
<b>Ute. Butte</b> 5,988.0	0.00	0.00	5,873.0	-86.1	-683.6	689.0	0.00	0.00	0.00
<b>CR 1</b> 6,000.0 6,100.0 6,148.0	0.00 0.00 0.00	0.00 0.00 0.00	5,885.0 5,985.0 6,033.0	-86.1 -86.1 -86.1	-683.6 -683.6 -683.6	689.0 689.0 689.0	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
<b>Wasatch</b> 6,200.0 6,249.0	0.00 0.00	0.00 0.00	6,085.0 6,134.0	-86.1 -86.1	-683.6 -683.6	689.0 689.0	0.00 0.00	0.00 0.00	0.00 0.00
6,300.0 6,400.0 6,500.0	0.00 0.00 0.00	0.00 0.00 0.00	6,185.0 6,285.0 6,385.0	-86.1 -86.1 -86.1	-683.6 -683.6 -683.6	689.0 689.0 689.0	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
6,523.0	0.00	0.00	6,408.0	-86.1	-683.6	689.0	0.00	0.00	0.00
6,600.0 6,700.0 6,800.0 6,835.0	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	6,485.0 6,585.0 6,685.0 6,720.0	-86.1 -86.1 -86.1 -86.1	-683.6 -683.6 -683.6 -683.6	689.0 689.0 689.0 689.0	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
CR 4									



# **Payzone Directional**

Planning Report

MD Reference:

North Reference:



Database: Company: MasterDB

**Bill Barrett Corporation** 

Local Co-ordinate Reference: TVD Reference:

Well LC Tribal 13-25D-46

LC Tribal 13-25D-46 @ 7039.0usft (Original

LC Tribal 13-25D-46 @ 7039.0usft (Original

Well Elev)

True

Site:

Project: Fort Duchesne

Well:

SECTION 25 T4S, R6W LC Tribal 13-25D-46

Wellbore: Wellbore #1 Design: Design #1

**Survey Calculation Method:** 

anned Survey									
Measured Depth (usft)	Inclination Azimuth		Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)			Build Rate (°/100usft)	Turn Rate (°/100usft)
6,900.0 7,000.0 7,080.0	0.00 0.00 0.00	0.00 0.00 0.00	6,785.0 6,885.0 6,965.0	-86.1 -86.1 -86.1	-683.6 -683.6 -683.6	689.0 689.0 689.0	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
CR 4A									
7,100.0 7,200.0	0.00 0.00	0.00 0.00	6,985.0 7,085.0	-86.1 -86.1	-683.6 -683.6	689.0 689.0	0.00 0.00	0.00 0.00	0.00 0.00
7,210.0	0.00	0.00	7,095.0	-86.1	-683.6	689.0	0.00	0.00	0.00
CR 5									
7,300.0 7,400.0 7,500.0 7,600.0	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	7,185.0 7,285.0 7,385.0 7,485.0	-86.1 -86.1 -86.1 -86.1	-683.6 -683.6 -683.6 -683.6	689.0 689.0 689.0 689.0	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
7,710.0	0.00	0.00	7,595.0	-86.1	-683.6	689.0	0.00	0.00	0.00
TD at 7710.0									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LC Tribal 13-25D-46 TG - plan hits target cent - Point	0.00 er	0.00	3,757.0	-86.1	-683.6	11,094,147.46	1,915,774.94	40° 5' 56.400 N	110° 30' 59.290 W

Formations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	1,753.4	1,748.0	Water		0.00	
	2,029.0	2,011.0	Green River		0.00	
	2,748.3	2,674.0	Mahogany		0.00	
	3,872.0	3,757.0	TGR3		0.00	
	4,650.0	4,535.0	Douglas Creek		0.00	
	4,999.0	4,884.0	3PT MKR		0.00	
	5,391.0	5,276.0	BI Shale Facies		0.00	
	5,599.0	5,484.0	Castle Peak		0.00	
	5,936.0	5,821.0	Ute. Butte		0.00	
	5,988.0	5,873.0	CR 1		0.00	
	6,148.0	6,033.0	Wasatch		0.00	
	6,249.0	6,134.0	CR 2		0.00	
	6,523.0	6,408.0	CR 3		0.00	
	6,835.0	6,720.0	CR 4		0.00	
	7,080.0	6,965.0	CR 4A		0.00	
	7,210.0	7,095.0	CR 5		0.00	



# **Payzone Directional**

Planning Report



Database: Company:

Project:

MasterDB

Fort Duchesne

**Bill Barrett Corporation** 

Local Co-ordinate Reference:

Well LC Tribal 13-25D-46

TVD Reference:

MD Reference:

North Reference:

LC Tribal 13-25D-46 @ 7039.0usft (Original

LC Tribal 13-25D-46 @ 7039.0usft (Original

Well Elev) True

SECTION 25 T4S, R6W Site:

Well: LC Tribal 13-25D-46

Wellbore: Wellbore #1 Design: Design #1

**Survey Calculation Method:** 

lan Annotations				
Measured	Vertical	Local Coor	dinates	
Depth	Depth	+N/-S	+E/-W	
(usft)	(usft)	(usft)	(usft)	Comment
1,200.0	1,200.0	0.0	0.0	Start Build 2.50
2,118.6	2,094.2	-22.7	-180.2	Start 834.7 hold at 2118.6 MD
2,953.3	2,862.8	-63.4	-503.4	Start Drop -2.50
3,872.0	3,757.0	-86.1	-683.6	Start 3838.0 hold at 3872.0 MD
7,710.0	7,595.0	-86.1	-683.6	TD at 7710.0

## **SURFACE USE PLAN**

#### **BILL BARRETT CORPORATION**

# LC Tribal 13-25D-46 Well Pad

SESW, 895' FSL and 1963' FWL, Section 25, T4S-R6W, USB&M (surface hole) SWSW, 808' FSL and 1280' FWL, Section 25, T4S-R6W, USB&M (bottom hole) Duchesne County, Utah

The onsite inspection for this pad occurred on May 23, 2013. This is a new pad with one proposed well. Plat changes and site specific stipulations requested at the onsite are reflected within this APD and summarized below.

- 1) Large cuts and fills but no pad changes required;
- 2) Extend spoils around corner 4 in a discontinuous topsoil pile within the 25 foot surface use perimeter;
- 3) Extend topsoil around corners 1, 2 and 6 in a discontinuous topsoil pile within the 25 foot surface use perimeter;
- 4) Production equipment to be located at corner 3 to maximize interim reclamation.

The excavation contractor would be provided with an approved copy of the surface use plan of operations before initiating construction.

# 1. <u>Existing Roads:</u>

- a. The proposed well site is located approximately 17.9 miles southwest of Duchesne, Utah. Maps and directions reflecting the route to the proposed well site are included (see Topographic maps A and B).
- b. The existing State Highway 191 would be utilized for 3.5 miles to an existing BBC maintained access road that provides access to the planned new access road.
- c. Project roads would require routine year-round maintenance to provide year-round access. Maintenance would include inspections, reduction of ruts and holes, maintenance to keep water off the road, replacement of surfacing materials, and clearing of sediment blocking ditches and culverts. Should snow removal become necessary, roads would be cleared with a motor grader and snow would be stored along the down gradient side to prohibit runoff onto the road. Aggregate would be used as necessary to maintain a solid running surface and minimize dust generation.
- d. Vehicle operators would obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions. Travel would be limited to the existing access roads and proposed access road.
- e. The use of roads under State and Duchesne County Road Department maintenance are necessary to access the project area with no improvements proposed. No encroachment or pipeline crossing permits are required.

Bill Barrett Corporation Surface Use Plan LC Tribal 13-25D-46 Duchesne County, UT

f. All existing roads would be maintained and kept in good repair during all phases of operation.

## 2. Planned Access Road:

- a. Approximately 897 feet of new access road trending southeasterly is planned from an existing BBC maintained access road (see Topographic Map B).
- b. The planned access road would be constructed to a 30-foot ROW width with an 18-foot travel surface. See section 12.d. below for disturbance estimates.
- c. New road construction and improvements of existing roads would typically require the use of motor graders, crawler tractors, 10-yard end dump trucks, and water trucks. The standard methodology for building new roads involves the use of a crawler tractor or track hoe to windrow the vegetation to one side of the road corridor, remove topsoil to the opposing side of the corridor, and rough-in the roadway. This is followed by a grader or bulldozer to establish barrow ditches and crown the road surface. Where culverts are required, a track hoe or backhoe would trench the road and install the culverts. Some hand labor would be required when installing and armoring culverts. Road base or gravel in some instances would be necessary and would be hauled in and a grader used to smooth the running surface.
- d. The proposed road would be constructed to facilitate drainage, control erosion and minimize visual impacts by following natural contours where practical. No unnecessary side-casting of material would occur on steep slopes.
- e. A maximum grade of 10% would be maintained throughout the project with minimum cuts and fills, as necessary, to access the well.
- f. Excess rock from construction of the pad may be used for surfacing of the access road if necessary. Any additional aggregate necessary would be obtained from private or State of Utah lands in conformance with applicable regulations. Aggregate would be of sufficient size, type, and amount to allow all weather access and alleviate dust.
- g. Where topsoil removal is necessary, it would be windrowed (i.e. stockpiled/accumulated along the edge of the ROW and in a low row/pile parallel with the ROW) and re-spread over the disturbed area after construction and backfilling are completed. Vegetation removed from the disturbed area would also be re-spread to provide protection, nutrient recycling, and a seed source for reclamation.
- h. Turnouts are not proposed.

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- i. No culverts or low-water crossings are anticipated. Adequate drainage structures, where necessary, would be incorporated into the remainder of the road to prevent soil erosion and accommodate all-weather traffic.
- j. No gates or cattle guards are anticipated at this time.
- k. Surface disturbance and vehicular travel would be limited to the approved location access road. Adequate signs would be posted, as necessary, to warn the public of project related traffic.
- All access roads and surface disturbing activities would conform to the
  appropriate standard, **no higher than necessary**, to accommodate their intended
  function adequately as outlined in the Bureau of Land Management and Forest
  Service publication: <u>Surface Operating Standards for Oil and Gas Exploration</u>
  and Development, Fourth Edition Revised 2007.
- m. The operator would be responsible for all maintenance needs of the new access road.

# 3. Location of Existing Wells (see One-Mile Radius Map):

a. Following is a list of wells with surface hole locations within a one-mile radius of the proposed pad:

i.	water wells	none
ii.	injection wells	none
iii.	disposal wells	none
iv.	drilling wells	none
v.	temp shut-in wells	none
vi.	producing wells	one
vii.	abandoned wells	two

#### 4. Location of Production Facilities

- a. Surface facilities would consist of a wellhead, separator, gas meter, combustor, (1) 500 gal methanol tank, (1) 500 gal glycol tank, (3) 500 bbl oil tanks, (1) 500 bbl water tank, (1) 500 bbl test tank, (1) 1000 gal propane tank, a pumping unit or Roto-flex unit or ESP or gas lift unit, electrical or with a natural gas or diesel fired motor, solar panels, solar chemical and methanol pumps and one trace pump. See attached proposed facility diagram.
- b. Most wells would be fitted with a pump jack or Roto-flex unit or ESP or gas lift to assist liquid production. The prime mover for pump jacks or Roto-flex units would be small (100 horsepower or less), electric motor or natural gas or diesel fired internal combustion engines. If a gas lift is installed, it would be set on a 10 ft x 25 ft pad and the prime mover would be a natural gas-fired internal combustion engine rated at 200 horsepower or less or an electric compressor of similar horsepower powered by electricity.

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- c. The tank battery would be surrounded by a secondary containment berm of sufficient capacity to contain 1.1 times the entire capacity of the largest single tank and sufficient freeboard to contain precipitation. All loading lines and valves would be placed inside the berm surrounding the tank battery or would utilize catchment basins to contain spills. All liquid hydrocarbon production and measurement shall conform to the provisions of 43 CFR 3162.7-2 and Onshore Oil and Gas Order No. 4 for the measurement of oil.
- d. Gas meter run(s) would be constructed and located on lease within 500 feet of the wellheads. Meter runs would be housed and/or fenced. As practicably feasible, meters would be equipped with remote telemetry monitoring systems. All gas production and measurement shall comply with the provisions of 43 CFR 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.
- e. A combustor may be installed at this location for control of associated condensate tank emissions. A combustor ranges from 24 inches to 48 inches wide and is approximately 27 ft tall. Combustor placement would be on existing disturbance.
- f. Approximately 960 feet of pipeline corridor (see Topographic Map C) containing up to three lines (one gas pipeline up to 8 inch in diameter, one water line up to 4 inch in diameter and one residue line up to 4 inch in diameter) is proposed trending northwesterly to an existing pipeline. Pipelines would be constructed of steel, polyethylene or fiberglass and would connect to the existing pipeline servicing nearby BBC wells. The pipeline crosses entirely Ute Tribe surface.
- g. The new segment of gas pipeline would be surface laid or buried within a 30 foot wide pipeline corridor adjacent to the proposed access road. Approval to bury pipelines would be obtained from the appropriate surface owner(s). See 12.d below for disturbance estimates.
- h. A slug catcher and/or pig launcher may be installed within the 30 foot pipeline corridor.
- i. Construction of the ROW would temporarily utilize the 30 foot disturbed width for the road for a total disturbed width of 60 foot for the road and pipeline corridors. The use of the proposed well site and access roads would facilitate the staging of the pipeline construction.
- j. Pipeline construction methods and practices would be planned and conducted by BBC with the objective of enhancing reclamation and fostering the reestablishment of the native plant community.
- k. All permanent above-ground structures would be painted a flat, non-reflective color, such as Beetle Green, to match the standard environmental colors. All

Bill Barrett Corporation Surface Use Plan LC Tribal 13-25D-46 Duchesne County, UT

facilities would be painted the designated color at the time of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.

- 1. Site security guidelines identified in 43 CFR 3162.7-5 and Onshore Oil and Gas Order No. 3 would be adhered to. Any modifications to proposed facilities would be reflected in the site security diagram submitted.
- m. The site would require periodic maintenance to ensure that drainages are kept open and free of debris, and that surfaces are properly treated to reduce erosion, fugitive dust, and impacts to adjacent areas.

# 5. <u>Location and Type of Water Supply:</u>

a. Water for the drilling and completion would be trucked from any of the following locations:

Water Right No.	Applicant	Allocation	Date	Point of Diversion	Source
42-180	Duchesne City Water	5 cfs	8/2004	Knight Diversion	Duchesne River
	Service District			Dam	
43-1202	Myton City	5.49 cfs and	3/1986	Knight Diversion	Duchesne River
		3967 acre ft		Dam	
43-10444	Duchesne County Upper	2 cfs	1994	Ditch at Source	Cow Canyon
	Country Water				Spring
43-10446	Duchesne County Upper	1.58 cfs	1994	Ditch at Source	Cow Canyon
	Country Water				Spring
43-1273	J.J.N.P. Company	7 cfs	1946	Strawberry River	Strawberry River
43-1273	J.J.N.P. Company	4 cfs	6/2010	Strawberry River	Strawberry River
43-2505	McKinnon Ranch	1.3 cfs	4/2011	Pumped from	Water Canyon
	Properties, LC			Sec, 17,	Lake
				T4SR6W	
43-12415	Peatross Ranch, LLC	66.44 acre ft	09/2011	Sec 8,	Strawberry River
				T4S-R6W	
43-1628	Douglas E & Yordis	.1 cfs	1905	Sec 12,	Nielsen Pond/
	Nelson			T5S-R6W	Indian Canyon
43-203	Duchesne City	8 cfs	7/1905	Sec 24,	Water Load Out
				T3S-R5W	
43-8342	East Duchesne Culinary	197.64 acre ft	8/1906	Sec 27,	High Desert
				T3S-R5W	Water Load Out
43-11555	East Duchesne Culinary	148.71 acre ft	2/1914	Sec. 27,	High Desert
				73S-R2E	Water Load Out

b. No new water well is proposed with this application.

Bill Barrett Corporation Surface Use Plan LC Tribal 13-25D-46 Duchesne County, UT

- c. Should additional water sources be pursued they would be properly permitted through the State of Utah Division of Water Rights.
- d. Water use would vary in accordance with the formations to be drilled but would be up to approximately 5.41 acre feet for drilling and completion operations.

## 6. Source of Construction Material:

- a. The use of materials would conform to 43 CFR 3610.2-3.
- b. No construction materials would be removed from the lease or EDA area.
- c. If any additional gravel is required, it would be obtained from a local supplier having a permitted source of materials within the general area.

## 7. Methods of Handling Waste Disposal:

a. All wastes associated with this application would be contained and disposed of utilizing approved facilities.

#### Closed Loop Drilling System

- b. The cuttings would be stored on location in a cuttings containment area and would be buried on-site or hauled to a state-approved disposal facility. If buried on-site, all free fluids would be removed to the extent recoverable and the contents would be solidified, encapsulating the contents within the liner.
- c. The cuttings containment area would be lined with 12 mil (minimum) thickness polyethylene nylon reinforced liner material. The liner(s) would overlay straw, dirt and/or bentonite if rock is encountered during excavation. The liner would overlap the containment area walls and be covered with dirt and/or rocks to hold them in place. No trash, scrap pipe, or other materials that could puncture the liner would be discarded in the pit.
- d. Cuttings would be contained onsite for a period not to exceed 90 days, weather permitting.
- e. To deter livestock from entering the containment area, the three sides exterior to the location would be fenced before drilling starts. Following the conclusion of drilling and completion activities, the fourth side would also be fenced.

## Conventional Drilling System

f. In the event closed loop drilling is not employed, the cuttings would be placed in the reserve pit. The reserve pit would also store water to make up losses and store any excess drilling fluids.

Bill Barrett Corporation Surface Use Plan LC Tribal 13-25D-46 Duchesne County, UT

- g. The reserve pit would be constructed so as not to leak, break or allow any discharge.
- h. The reserve pit would be lined with 12 mil (minimum) thickness polyethylene nylon reinforced liner material. The liner(s) would overlay straw, dirt and/or bentonite if rock is encountered during excavation. The liner would overlap the pit walls and be covered with dirt and/or rocks to hold them in place. No trash, scrap pipe, or other materials that could puncture the liner would be discarded in the pit. A minimum of two feet of free board would be maintained between the maximum fluid level and the top of the reserve pit at all times.
- i. To deter livestock from entering the pit, the three sides exterior to the location would be fenced before drilling starts. Following the conclusion of drilling and completion activities, the fourth side would also be fenced.
- j. Drill cuttings would be contained in the pit for a period not to exceed six months, and then be buried onsite, weather permitting
- k. Hydrocarbons would be removed from the reserve pit would as soon as practical. In the event immediate removal is not practical, the reserve pit would be flagged overhead or covered with wire or plastic mesh to protect migrating birds.

#### Other

 Produced fluids from the well other than water would be decanted into steel test tank(s) until such time as construction of production facilities is completed. Any oil that may be accumulated would be transferred to a permanent production tank. Produced water may be used in further drilling and completion activities, evaporated in the pit, or would be hauled to one of the state-approved disposal facilities below:

# **Disposal Facilities**

- 1. RNI Industries, Inc. Pleasant Valley Disposal Pits, Sec. 25, 26, 35 & 36, T4S-R3W
- 2. Pro Water LLC Blue Bench 13-1 Disposal Well (43-013-30971) NENE, Sec. 13, T3S-R5W
- 3. RN Industries, Inc. Bluebell Disposal Ponds, Sec. 2, 4 & 9, T2S-R2W
- 4. Water Disposal, Inc. Harmston 1-32-A1 Disposal Well (43-013-30224), UTR #00707, Sec. 32, T1S-R1W
- 5. Unified Water Pits Sec. 31, T2S-R4W
- 6. Iowa Tank Line Pits 8500 BLM Fence Road, Pleasant Valley
- 7. Western Water Solutions Sand Pass Ranch, Sections 9 and 10, T4S-R1W, permit #WD-01-2011
- 8. Bill Barrett Corporation SWD Wells: 9-36 BTR SWD (43-013-50646), 6-32-36 BTR SWD (43-013-50921) and 16-6D-46 BTR SWD (43-013-50781)

Bill Barrett Corporation Surface Use Plan LC Tribal 13-25D-46 Duchesne County, UT

- g. Any salts and/or chemicals, which are an integral part of the drilling system, would be disposed of in the same manner as the drilling fluid.
- h. Any spills of oil, condensate, produced or frac water, drilling fluids, or other potentially deleterious substances would be recovered and either returned to its origin or disposed of at an approved disposal site, most likely in Duchesne, Utah.
- i. Chemicals on the EPA's Consolidated List of Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) may be used or stored in quantities over reportable quantities. In the course of drilling, BBC could potentially store and use diesel fuel, sand (silica), hydrochloric acid, and CO<sub>2</sub> gas, all described as hazardous substances in 40 CFR Part 302, Section 302.4, in quantities exceeding 10,000 pounds. In addition, natural gas condensate and crude oil and methanol may be stored or used in reportable quantities. Small quantities of retail products (paint/spray paints, solvents {e.g., WD-40}, and lubrication oil) containing non-reportable volumes of hazardous substances may be stored and used on site at any time. No extremely hazardous substances, as defined in 40 CFR 355, would be used, produced, stored, transported or disposed of in association with the drilling, testing or completion of the wells.
- j. Portable toilets and trash containers would be located onsite during drilling and completion operations. A commercial supplier would install and maintain portable toilets and equipment and would be responsible for removing sanitary waste. Sanitary waste facilities (i.e. toilet holding tanks) would be regularly pumped and their contents disposed of at approved sewage disposal facilities in Duchesne, and/or Uintah Counties, in accordance with applicable rules and regulations regarding sewage treatment and disposal. Accumulated trash and nonflammable waste materials would be hauled to an approved landfill once a week or as often as necessary. All debris and waste materials not contained in the trash containers would be cleaned up, removed from the construction ROW, well pad, or worker housing location, and disposed of at an approved landfill. Trash would be cleaned up everyday.
- k. Sanitary waste equipment and trash bins would be removed from the Project Area upon completion of access road or pipeline construction; following drilling and completion operations at an individual well pad; when worker housing is no longer needed; or as required.
- 1. A flare pit may be constructed a minimum of 110' from the wellhead(s) and may be used during completion work. In the event a flare pit proves to be unworkable, a temporary flare stack or open top tank would be installed. BBC would flow back as much fluid and gas as possible into pressurized vessels, separating the fluids from the gas. In some instances, due to the completion fluids utilized within the Project Area, it is not feasible to direct the flow stream from the wellbore through pressurized vessels. In such instances BBC proposes to direct the flow to the open top tanks until flow through the pressurized vessels is feasible. At which point the fluid would either be returned to the reserve pit or

Bill Barrett Corporation Surface Use Plan LC Tribal 13-25D-46 Duchesne County, UT

placed into a tank(s). The gas would be directed to the flare pit, flare stack (each with a constant source of ignition), or may be directed into the sales pipeline.

## 8. <u>Ancillary Facilities:</u>

- a. Garbage containers and portable toilets would be located on the well pad.
- b. On well pads where active drilling and completion is occurring, temporary housing would be provided on location for the well pad supervisor, geologist, tool pusher, and others that are required to be on location at all times. The well pad could include up to five single wide mobile homes or fifth wheel campers/trailers.
- c. A surface powerline corridor 913 feet in length is proposed for installation by a third-party installer within a 50 foot wide construction corridor adjacent to the proposed access road. Disturbance will be minimal to avoid additional impacts to soils and vegetation by installing the powerline on the surface and raising it into place. See 12.d below for disturbance estimates.

# 9. Well Site Layout:

- a. The well would be properly identified in accordance with 43 CFR 3162.6.
- b. The pad layout, cross section diagrams and rig layout are enclosed (see Figures 1 and 2).
- c. The pad and road designs are consistent with industry specifications.
- d. The pad has been staked at its maximum size of 400 feet x 270 feet with an inboard reserve pit size of 235 feet x 70 feet x 8 feet deep. See section 12.d below for disturbance estimates.
- e. Within the approved well pad location, a crawler tractor would strip whatever topsoil is present and stockpile it along the edge of the well pad for use during reclamation. Vegetation would be distributed along the sides of the well pad.
- f. Fill from pit excavation would be stockpiled along the edge of the pit and the adjacent edge of the well pad.
- g. Use of erosion control measures, including proper grading to minimize slopes, diversion terraces and ditches, mulching, terracing, riprap, fiber matting, temporary sediment traps, and broad-based drainage dips or low water crossings would be employed by BBC as necessary and appropriate to minimize erosion and surface runoff during well pad construction and operation. Cut and fill slopes would be constructed such that stability would be maintained for the life of the activity.

Bill Barrett Corporation Surface Use Plan LC Tribal 13-25D-46 Duchesne County, UT

- h. All cut and fill slopes would be such that stability can be maintained for the life of the activity.
- i. Diversion ditches would be constructed, if necessary, around the well site to prevent surface waters from entering the well site area.
- j. Water application may be implemented if necessary to minimize the amount of fugitive dust.
- k. All surface disturbing activities would be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plans.

## 10. Plan for Restoration of the Surface:

- a. A site specific reclamation plan would be submitted, if requested, within 90 days of location construction to the surface managing agency.
- b. Site reclamation would be accomplished for portions of the well pad not required for the continued operation of the well on this pad within six months of completion, weather permitting.
- c. The operator would control noxious weeds along access road use authorizations and well site by spraying or mechanical removal, according to the Utah Noxious Weed Act and as set forth in the approved surface damage agreements.
- d. Rat and mouse holes would be filled and compacted from bottom to top immediately upon release of the drilling rig from location. Upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1. The reserve pit would be allowed to dry prior to the commencement of backfilling work. No attempts would be made to backfill the reserve pit until it is free of standing water. Once dry, the liner would be torn and perforated before backfilling.
- e. The reserve pit or cuttings containment area, and that portion of the location not needed for production facilities/operations would be recontoured to the approximate natural contours. Areas not used for production purposes would be backfilled and blended into the surrounding terrain, reseeded and erosion control measures installed. Mulching, erosion control measures and fertilization may be required to achieve acceptable stabilization. Back slopes and fore slopes would be reduced as practical and scarified with the contour. The reserved topsoil would be evenly distributed over the slopes and scarified along the contour. Slopes would be seeded with the seed mix specified by the surface owner.
- f. Topsoil salvaged from the drill site and stored for more than one year would be placed at the location indicated on the well site layout drawing and graded to a depth optimum to maintain topsoil viability, seeded with the surface owner

Bill Barrett Corporation Surface Use Plan LC Tribal 13-25D-46 Duchesne County, UT

prescribed seed mixture and covered with mulch for protection from wind and water erosion and to discourage the invasion of weeds.

# 11. <u>Surface and Mineral Ownership:</u>

- a. Surface ownership Ute Indian Tribe 988 South 7500 East; Ft. Duchesne, Utah 84026; 435-725-4982.
- b. Mineral ownership Ute Indian Tribe 988 South 7500 East; Ft. Duchesne, Utah 84026; 435-725-4982.

## 12. <u>Other Information:</u>

- a. Montgomery Archeological Consultants has conducted a Class III archeological survey. A copy of the report has been submitted under separate cover to the appropriate agencies by Montgomery as report 13-042 (U-13-MQ-0263i) dated May 7, 2013.
- BBC would require that their personnel, contractors, and subcontractors to comply with Federal regulations intended to protect archeological and cultural resources.
- c. Project personnel and contractors would be educated on and subject to the following requirements:
  - No dogs or firearms within the Project Area.
  - No littering within the Project Area.
  - Smoking within the Project Area would only be allowed in off-operator
    active locations or in specifically designated smoking areas. All cigarette
    butts would be placed in appropriate containers and not thrown on the
    ground or out windows of vehicles; personnel and contractors would abide
    by all fire restriction orders.
  - Campfires or uncontained fires of any kind would be prohibited.
  - Portable generators used in the Project Area would have spark arrestors.

#### d. Disturbance estimates:

#### **Approximate Acreage Disturbances**

Well Pad		5.288	acres
Access	897 feet	0.617	acres
Pipeline	960 feet	0.661	acres
Powerline	913 feet	1.047	acres

Total 7.613 acres

Bill Barrett Corporation Surface Use Plan LC Tribal 13-25D-46 Duchesne County, UT

## **OPERATOR CERTIFICATION**

#### Certification:

I hereby certify that I, or someone under my direction supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein would be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application and that bond coverage is provided under Bill Barrett Corporations federal nationwide bond. These statements are subject to the provisions of 18 U.S.C. 1001 for the filings of false statements.

Executed this April 10, 2014

Name: Venessa Langmacher Position Title: Senior Permit Analyst

Address: 1099 18<sup>th</sup> Street, Suite 2300, Denver, CO 80202

Telephone: 303-312-8172

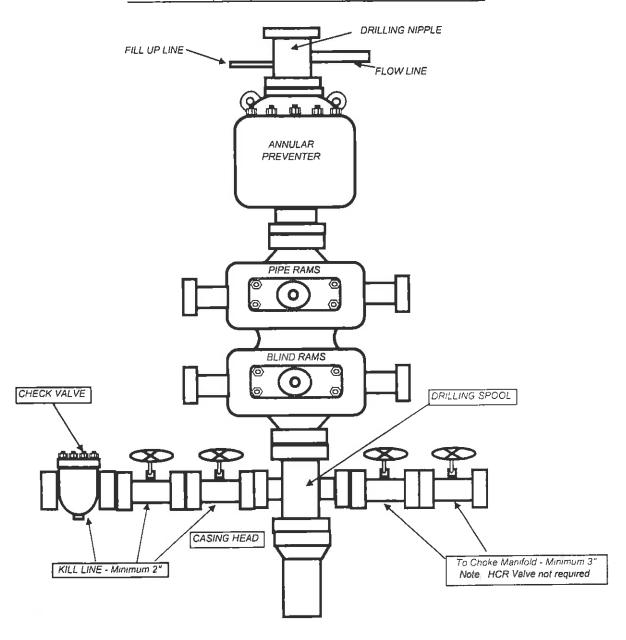
E-mail: vlangmacher@billbarrettcorp.com
Field Representative Kary Eldredge / Bill Barrett Corporation
Address: 1820 W. Highway 40, Roosevelt, UT 84066
Telephone: 435-725-3515 (office); 435-724-6789 (mobile)

E-mail: keldredge@billbarrettcorp.com

Venessa Langmacher, Senior Permit Analyst

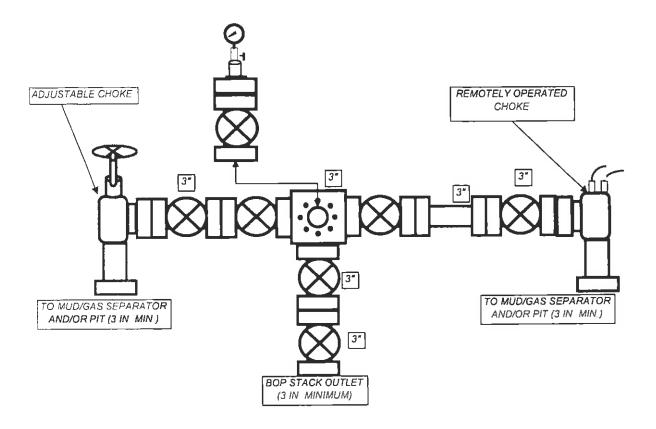
# **BILL BARRETT CORPORATION**

# TYPICAL 5,000 p.s.i. BLOWOUT PREVENTER



# **BILL BARRETT CORPORATION**

TYPICAL 5,000 p.s.i. CHOKE MANIFOLD





April 10, 2014

Ms. Diana Mason - Petroleum Technician State of Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 P. O. Box 145801 Salt Lake City, Utah 84114-5801

Re: Directional Drilling R649-3-11

Lake Canyon Area #13-25D-46 LC Tribal Well

Surface: 895' FSL & 1,963' FWL, SESW, 25-T4S-R6W, USM Bottom Hole: 808' FSL & 1,280' FWL, SWSW, 25-T4S-R6W, USM

Duchesne County, Utah

Dear Ms. Mason,

Pursuant to the filing of Bill Barrett Corporation's ("BBC") Application for Permit to Drill the above referenced well, we hereby submit this letter in accordance with Oil & Gas Conservation Rules R649-2, R649-3, R649-10 and R649-11, pertaining to the Location and Siting of Wells.

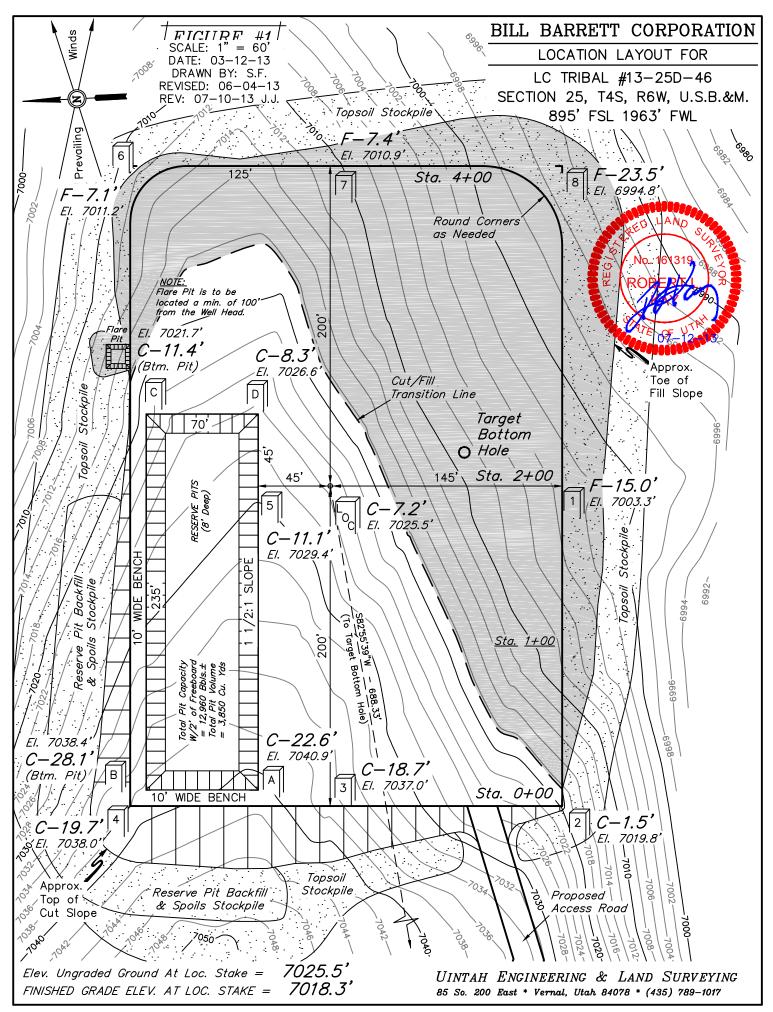
- The proposed location is within our Lake Canyon Area.
- BBC is permitting this well as a directional well in order to minimize surface disturbance. By locating the well at the surface location and directionally drilling from this location, BBC will be able to utilize the existing road and pipelines in the area.
- The well will be drilled under an Exploration and Development Agreement between the Ute Indian Tribe and Ute Distribution Corporation. Crescent Point Energy U.S. Corp owns a right to participate in this well.
- BBC certifies that it is the working interest owner of all lands within 460 feet of the proposed well location, and together with Crescent Point Energy U.S. Corp, we own 100% of the working interest in these lands.

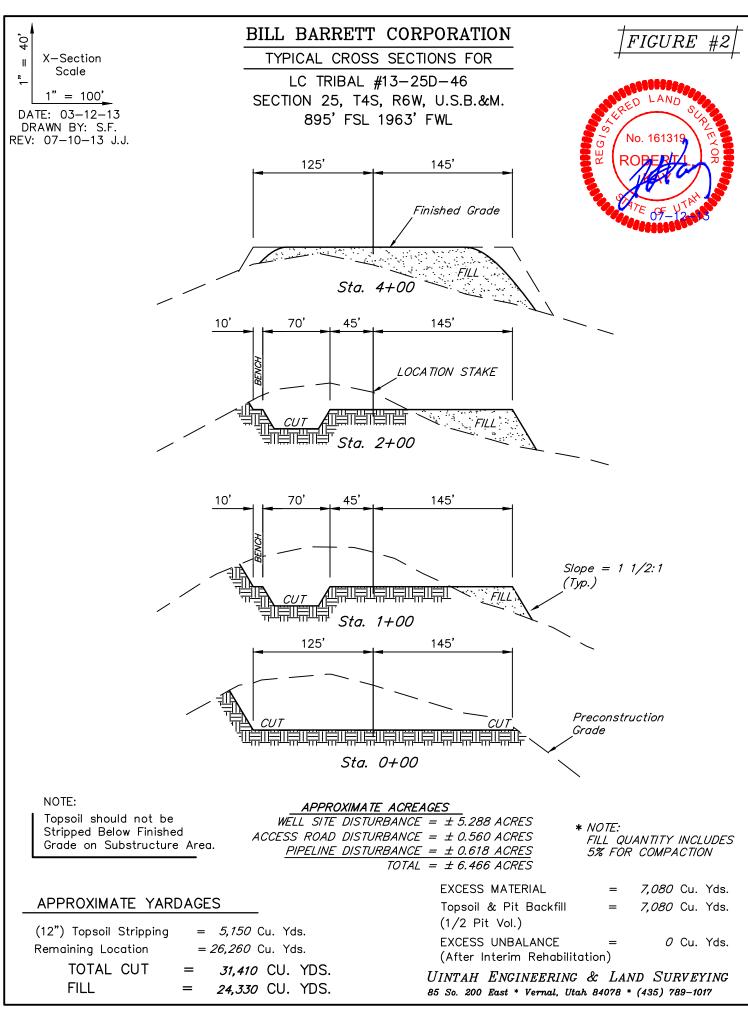
Based on the information provided, BBC requests that the permit be granted pursuant to R649-3-11. Should you have any questions or need further information, please contact me at 303-312-8544.

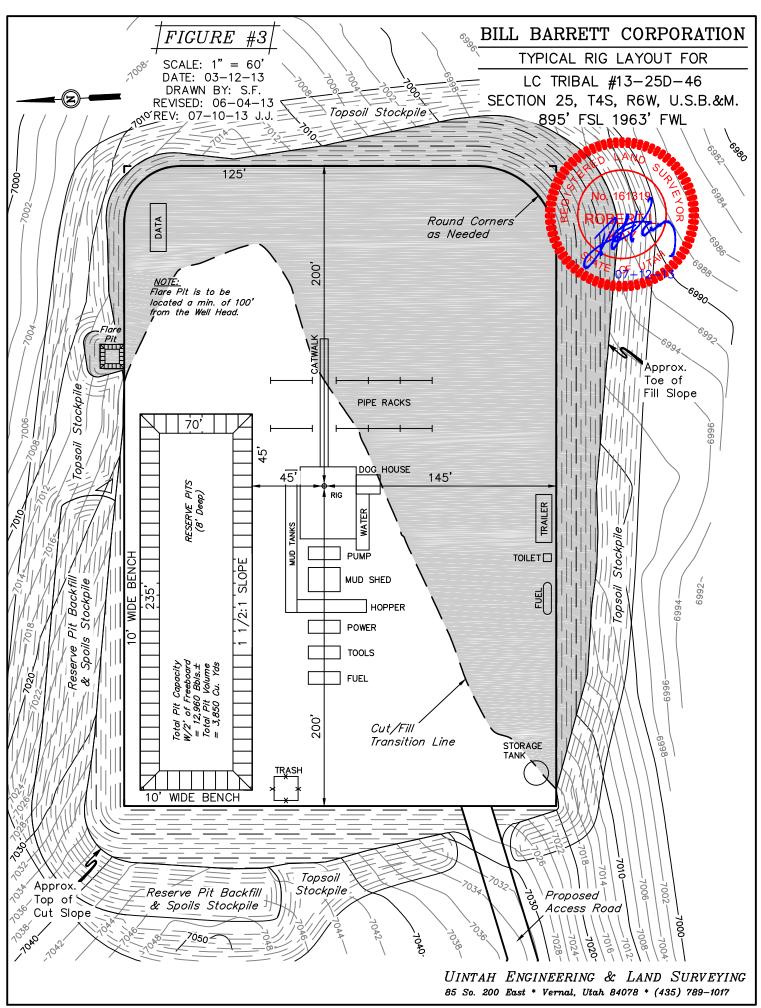
Sincerely,

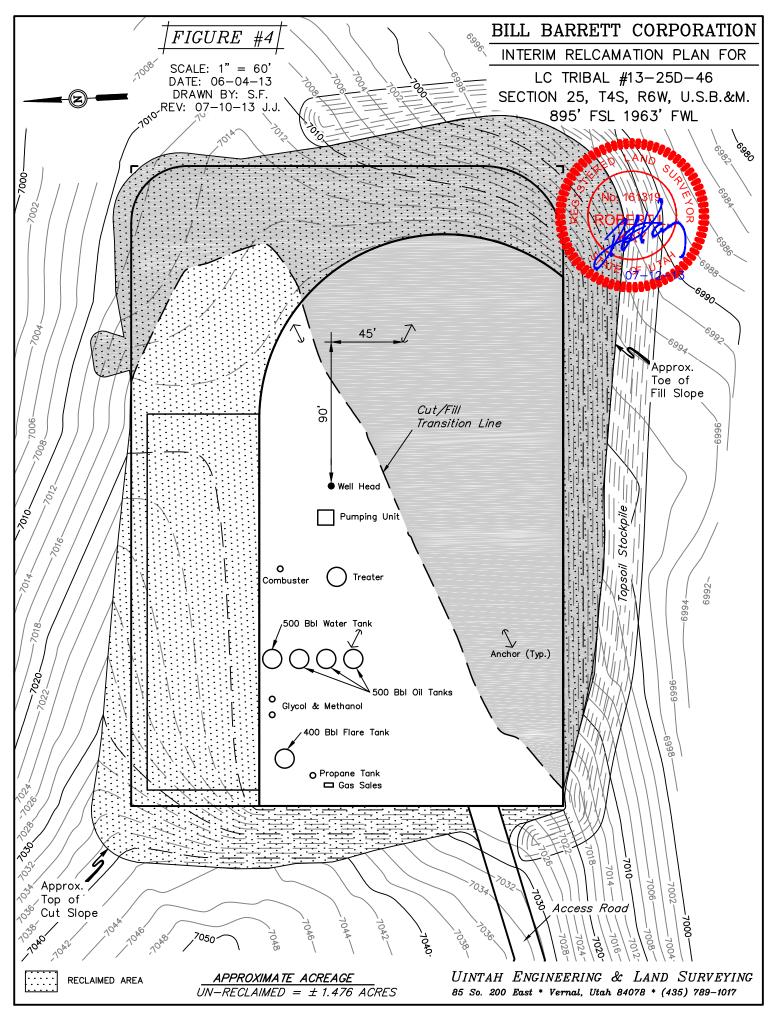
**David Watts** 

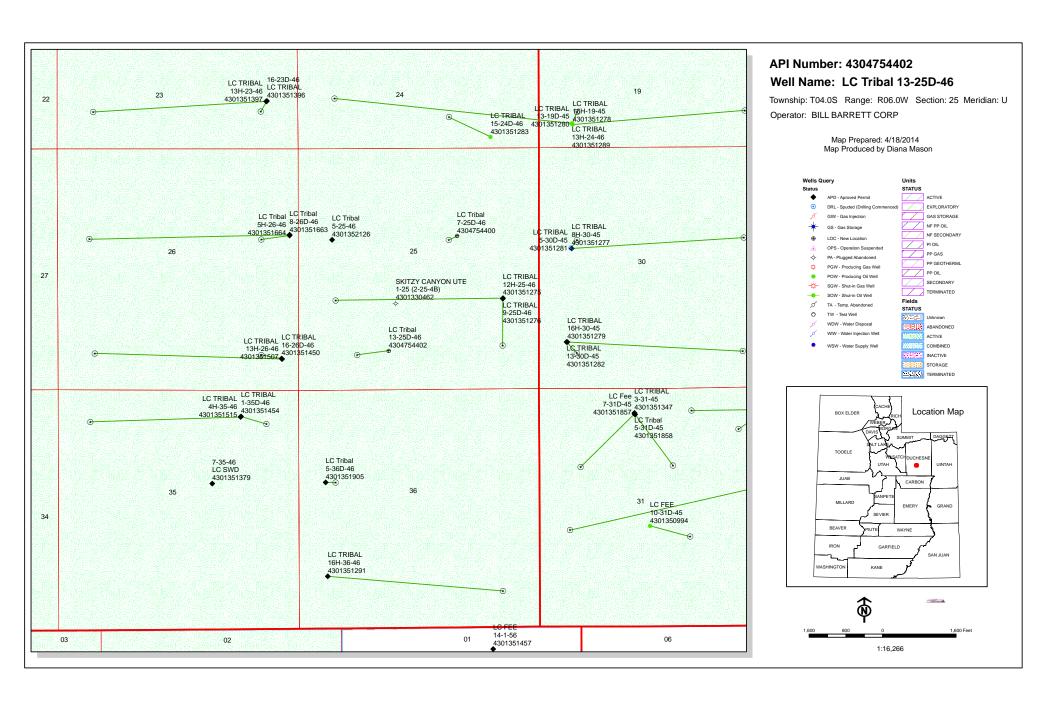
Landman











# **WORKSHEET** APPLICATION FOR PERMIT TO DRILL

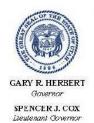
**APD RECEIVED:** 4/11/2014 API NO. ASSIGNED: 43047544020000 WELL NAME: LC Tribal 13-25D-46 **OPERATOR:** BILL BARRETT CORP (N2165) PHONE NUMBER: 303 312-8172 **CONTACT:** Venessa Langmacher PROPOSED LOCATION: SESW 25 040S 060W **Permit Tech Review: SURFACE**: 0895 FSL 1963 FWL **Engineering Review:** BOTTOM: 0808 FSL 1280 FWL **Geology Review: COUNTY: UINTAH LATITUDE**: 40.09913 LONGITUDE: -110.51402 UTM SURF EASTINGS: 541424.00 NORTHINGS: 4438873.00 FIELD NAME: ALTAMONT LEASE TYPE: 2 - Indian PROPOSED PRODUCING FORMATION(S): GREEN RIVER(LWR)-WASATCH LEASE NUMBER: 20G0005500 SURFACE OWNER: 2 - Indian **COALBED METHANE: NO RECEIVED AND/OR REVIEWED: LOCATION AND SITING:** ✓ PLAT R649-2-3. Bond: INDIAN - LPM8874725 Unit: **Potash** R649-3-2. General Oil Shale 190-5 R649-3-3. Exception Oil Shale 190-3 Oil Shale 190-13 **Drilling Unit** Board Cause No: Cause 139-87 Water Permit: 43-180 Effective Date: 12/6/2011 **RDCC Review:** Siting: 4 Wells Per 640 Acres Fee Surface Agreement Intent to Commingle ■ R649-3-11. Directional Drill

Comments: Presite Completed

**Commingling Approved** 

Stipulations: 4 - Federal Approval - dmason

15 - Directional - dmason



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

# Permit To Drill

\*\*\*\*\*

Well Name: LC Tribal 13-25D-46 API Well Number: 43047544020000 Lease Number: 20G0005500

Surface Owner: INDIAN Approval Date: 4/23/2014

## Issued to:

BILL BARRETT CORP, 1099 18th Street Ste 2300, Denver, CO 80202

## Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 139-87. The expected producing formation or pool is the GREEN RIVER(LWR)-WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

# **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

# **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil &

# Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
  - Requests to Change Plans (Form 9) due prior to implementation
  - Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
  - Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas



# State of Utah

**DEPARTMENT OF NATURAL RESOURCES** 

MICHAEL R. STYLER

Executive Director

Division of Oil, Gas and Mining

April 30, 2014

JOHN R. BAZA
Division Director

Venessa Langmacher Bill Barrett Corp. 1099 18<sup>TH</sup> Street, Suite 2300 Denver, CO 80202

Re:

APD Rescinded - LC Tribal 13-25D-46, Sec. 25 T.4S, R.6W

Uintah County, Utah API No. 43-047-54402

Dear Ms. Langmacher:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on April 23, 2014. On April 30, 2014 it was brought to the Divisions attention that this APD was sent in under the wrong County. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective April 30, 2014.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

**Environmental Scientist** 

andllasne

cc:

Well File

Bureau of Land Management, Uintah

